



# Job Loss Analysis

**ID No:** 1466365      **Status:** Closed

**Original Date:** 18/May/2009  
**Last Review Date:** 18/May/2009

**Organization:**

**SBU:** GLOBAL MANUFACTURING  
**BU:** ALL  
**Work Type:** Technical (Process Engineering)  
**Title (Work Activity):** Long Term Monitoring  
**Site/Region:**

Personal Protective Equipment (PPE)	Selected	Comments
Proper PPE per your Refinery Guidelines	Y	
Additional Task Specific PPE		
Other		

**Reviewers**

Reviewers Name	Position	Date Approved
Johansen, Michelle L (MLMJ)	Manager	18/May/2009

**Development Team**

Development Team Member Name	Primary Contact	Position
Okojie, Damilola (DOBT)	Y	Process Engineer
Stefanick, Brian (BSGX)	N	Process Engineer
Watson, Chris (CWDJ)	N	Process Engineer

**Job Steps**

No	Job Steps	Potential Hazard	Critical Actions
1	Review unit columns	1. Loss of HVP due to drifting cut points 2. Tray damage/mechanical damage (property loss)  3. Loss of column efficiency increases energy use  4. Product integrity	1. Set baseline- Proll/Design and baseline gamma scan 2. Track column performance through dP/dT measurements as well as Refrac 3. Monitor long term reliability and process variables (stripping steam, overhead injection, etc) using PMO and CPV database 4. Monitor product specifications

2	Review unit heat exchangers	<ol style="list-style-type: none"> <li>1. Loss of containment (high dP rupture, tube leak)</li> <li>2. Energy use increases due to fouling</li> <li>3. Cause plant limitations through fouling</li> </ol>	<ol style="list-style-type: none"> <li>1. Set baseline per design specifications</li> <li>2. a) Track heat exchanger performance through U calc and fouling coefficient within PMO b) Use Hexmon if available c) Regular IR monitoring for fin fans</li> <li>3. Track heat exchanger dP within PMO</li> </ol>
3	Review unit furnaces	<ol style="list-style-type: none"> <li>1. Energy use increase due to loss of efficiency</li> <li>2. Loss of containment</li> <li>3. Limits HVP due to fouling</li> </ol>	<ol style="list-style-type: none"> <li>1. Set baseline per design specifications</li> <li>2. Review reliability parameters</li> <li>3. a) Track performance through duty, efficiency, dP, skin temps, and O2 using trends in PMO b) Regular IR monitoring</li> </ol>
4	Review unit catalyst	<ol style="list-style-type: none"> <li>1. HVP due to loss of catalyst activity</li> <li>2. Decreased run length</li> <li>3. Lack of optimization</li> </ol>	<ol style="list-style-type: none"> <li>1. Monitor current operation by utilize radial dT, max CAT, axial dT, bed dP, reactor dP, skin TI's.</li> <li>2. a) Monitor catalyst activity through CAT manager b) Monitor feed for poisons</li> <li>3. Carry out test runs to establish optimum conditions where applicable</li> </ol>
5	Review unit compressors/pumps	<ol style="list-style-type: none"> <li>1. HVP loss due to decreased performance</li> <li>2. Energy use increases due to loss of efficiency</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure pumps are operating on pump curve</li> <li>2. Monitor compressor efficiency</li> </ol>
6	Review Unit performance with Technology Licensor or BIN leader	<ol style="list-style-type: none"> <li>1. Unit not being operated as per manufacturer's guidelines or most recent BIN practices. Potential damage to catalyst/equipment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review performance with Licensor or BIN leader on a quarterly basis.</li> </ol>